

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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March 17, 2010

TO: Internal File

THRU: Kevin Lundmark, Team Lead *KL*

FROM: Priscilla Burton, Environmental Scientist, III, Soils *PWB m 805*

RE: Change In Postmining Land Use Task ID #3496 and Permit Area Reduction Task ID #3495, Star Point Waste Fuel Refuse, C/007/0042, Tasks #3496 and #3495

### SUMMARY:

On February 25, the Division received a response to deficiencies previously noted in applications from Sunnyside Cogen to change the postmining land use, Task 3496, and reduce the permit area, Task 3495. Both Task 3495 and 3496 are reviewed in this document.

In Task 3496, the permittee proposes to change the postmining land use to industrial in the portion of the permit area that has been used by Cononco Phillips as a gas lease. The area being considered for post mining land use change is in the southwest edge of the existing refuse pile and is shown as hatched area on revised revegetation maps and final reclamation topography and subsoil cover maps. i.e. Ex. 542.200g. (This acreage is more specifically described on Exhibit 111.100a provided with Task 3495.)

Task 3496 post-mining land use change is for 13 acres of the operations pad that is actively being remined and extending up the hillside to include the undisturbed diversion ditch (most clearly shown on Ex. 542.200e Final Reclamation Topography). SCA will remove coal mine waste to the level of native soil and then cut to create a pad for the industrial post mining land use. Approximately 20,000 cu yds of excess will be used to create berms around the industrial site (personal communication with Scott Carlson, 9/16/2009).

Task 3495, further reduces the permit area by removing 54 acres of BLM lease lands and SCA fee lands.

Both applications include all the necessary information for approval. Task 3496 provides an update to the officers and directors and they have been entered into the AVS. An AVS evaluation should be requested prior to approval of either Task 3495 or Task 3496.

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**TECHNICAL ANALYSIS:**

**GENERAL CONTENTS**

**IDENTIFICATION OF INTERESTS**

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

**Analysis:**

Sunnyside Cogeneration Associates (SCA) is the Permittee for the Star Point Waste Fuel (SPWF) surface coal mining (re-mining) operation (MRP, Section 112). The resident agent for SCA is Richard Carter, Plant Manager (Section 112.200). The corporate ownership is presented in Section 112.300 and Exhibit 112.300. The AVS database has been updated accordingly.

Savage Services Corp. is the contract operator at the site (Chap. 1, Section 2.340-420). Information on officers and directors for Savage Services Corp. is provided in this section. The Savage Coal Terminal (007/0022) mining and reclamation plan maintains a current listing of officers and directors for Savage Services Corporation.

Contrary to what is stated in the last paragraph of Section 112.500, OSM determined that SCA is not subject to AML fees (see Exhibit 112.230a).

MSHA no longer tracks the refuse pile (Section 112.700 and Ex. 513).

Surface lands within the SPWF permit area are owned by Plateau Mining Corporation, the United States (administered by the BLM), and SCA (MRP, Section 112.500 and Section 114, Ex 114.100a and 114.100b). Land ownership is shown on Exhibit 111.100a. Ownership of the land under consideration for post mining land use change is held by both SCA and the BLM. The ownership of the surface will not change (Task 3363, Ex. 111.100a).

**Findings:**

The information provided meets the Identification of Interests requirements of the Regulations. Task 3496 provides an update to the officers and directors. An AVS evaluation should be requested prior to approval.

**VIOLATION INFORMATION**

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

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**Analysis:**

Violation history is recited in Section 113.300 - 350.

Exhibit 117.100a provides insurance information.

**Findings:**

The information provided meets the Violation Information requirements of the Regulations.

**RIGHT OF ENTRY**

Regulatory Reference: 30 CFR 778.15; R645-301-114

**Analysis:**

SCA owns the refuse (Section 114.200-230). SCA and BLM own the surface lands within the area to have a change of post mining land use (Exhibit 111.100a). As noted in Section 412.200, Conoco Phillips holds the BLM lease for the oil and gas development in Drunkards Wash in the NW1/4 Sec. 15, T 15 S, R 8 E. A Conoco Phillips representative was present during a courtesy inspection to discuss this amendment, see Inspection Report 2137. Exhibit 412.400a provides the BLM lease fluid mineral lease authorization.

**Findings:**

The information provided meets the Right of Entry requirements of the Regulations.

**LEGAL DESCRIPTION**

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

**Analysis:**

The area of post mining land use change is described in the DRAFT public notice that accompanied the application.

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**Findings:**

The information provided is adequate to meet the legal description requirement of the Regulations.

**PERMIT TERM**

Regulatory References: 30 CFR 778.17; R645-301-116.

**Analysis:**

The Utah mining permit was transferred from Plateau Mining Co. to Sunnyside Cogeneration Association on November 14, 2003. The current five year permit term expires in November 2013.

**Findings:**

The information provided is adequate to meet the permit term requirement of the Regulations.

**PUBLIC NOTICE AND COMMENT**

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

**Analysis:**

A copy of the public notice is included with the application. The notice will run for four consecutive weeks in the Sun Advocate. In accordance with R645-301-117.200, an affidavit of the public notice must be included in the application upon final approval.

**Findings:**

The information provided is adequate to meet the public notice requirement of the Regulations.

**MAPS AND PLANS**

Regulatory Reference: 30 CFR 777.14; R645-301-140.

The location of the land to undergo postmining land use change is illustrated on Exhibits 321.100b Disturbed Area Vegetation Map, 341.210a Bonding Scenario Revegetation Plan, 341.210b Final Reclamation Revegetation Plan, 542.200e Final Reclamation Topography, and 542.200g Subsoil Cover Plan.

### **Findings:**

The information provided is adequate for the purpose of the Maps and Plans requirements of the Regulations.

## **ENVIRONMENTAL RESOURCE INFORMATION**

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

### **PERMIT AREA**

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

### **Analysis:**

Map 111.100a, SCA/Star Point Waste Fuel Permit Boundary Map, shows location of the permit area and gives a detailed legal description. The permit area is divided into two areas, the refuse pile and the topsoil stockpile area (subsoil to be used as substitute topsoil).

The acreage for each parcel within the permit area is given on Map 111.100a. The parcels are owned either by Sunnyside Cogeneration Associates, the BLM, or Plateau Mining Corp. Exhibit 114.100a, Right of Entry Authorization Documents verifies the information on Map 111.100a.

Although the public notice for permit renewal dated November 14, 2008 in App 117.200b indicates the permit area is 188 acres, the public notice for tasks 3495 and 3496 describe an existing permit area of 153 acres. The public notice for Task 3495 describes a permit area reduction of 54 acres. The public notice for Task 3496 describes post mining land use for 13 acres.

Map 111.100a illustrates the resulting permit area of 99.13 acres as follows:

- 11.71 acres of leased BLM land,
- 5.96 acres of land owned by SCA in the topsoil parcel.
- 81.15 acres of land owned by SCA are in parcel 1.

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- 0.31 acres in the access road easement.  
99.13 acres Total Permit Area

Exhibit 112.500a, Land Classifications within the Permit Area, is a table of the acres owned by the federal government, SCA and PMC and the number of pre-law, post-law, undisturbed and reclaimed acres. The disturbed area includes 3.6 acres that have been reclaimed by Plateau Mining Corp. in 2001 (Section 117.300 and Exhibit 112.500a).

The disturbed area is identified in several maps, including Map 731.720a, Refuse Pile Surface Water and Sedimentation Control Facilities.

**Findings:**

The information provided meets the requirements of permit area.

**SOILS RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

**Analysis:**

The Order III Soil Survey of Carbon County conducted by the Soil Conservation Service in 1988 included the permit area proposed for the Star Point Waste Fuel Mine.

The location of the refuse pile was surveyed prior to disturbance in 1981 (see Exhibit 222).

Table 222.100a Permit Area Soil Types itemizes six soil types for the permit area. At an Order III level, the predominant soil types are Doney, Hernandez, and Strych. These map units are described in Exhibit 222.300b. Map 222.100a SCA/Star Point Waste Fuel Soils Map shows soil and refuse sample locations. Map 222.100b SCA/Star Point Waste Fuel Soils Disturbed Area Map shows the extent of the disturbed area. Within the disturbed area boundaries, the pre-existing soils would probably have been Gerst, Strych or Hernandez.

Topsoil and subsoil was salvaged from beneath the refuse pile in 1982. The material was segregated in two piles. The subsoil pile (C horizon) was transferred to SCA for the proposed Star Point Waste Fuel Mine and the topsoil pile (upper horizons A & B) remained with Plateau Mining Corp (C/007/006). The analysis of both materials is found in Table 243 Refuse Expansion Area Soil Analysis. The material was tested for and meets the suitability requirements for use as substitute topsoil.

The quality of the stockpiled subsoil is represented by the C horizon samples included in Table 243. Subsoil to be used as substitute topsoil was removed from the refuse pile site in 1982 under the ownership of Cypress Plateau Mining Corporation (CPMC). The applicant uses the term subsoil throughout the mining and reclamation plan.

Section 234 describes subsoil storage. The subsoil is stockpiled with 2h:1v slopes and is vegetated. Exhibit 234 outlines the seed mix used in 1982 on the subsoil stockpile. Erosion from the stockpile is controlled by vegetation, a sediment trap, and runoff control terraces (Section 234).

The location of subsoil pile is shown on Map 521.100d, SCA/Star Point Waste Fuel Refuse Pile Operation Plan Overview, and on Map 111.100a SCA/Star Point Waste Fuel Refuse Permit Boundary Survey.

The volume of substitute topsoil has been surveyed at 192,000 cu yds by CPMC. SCA estimates that 235,000 cu yds will be available during reclamation due to a swelling of the material. (The compaction factor of 0.3 was used based on published research (page 200-9.)

### **Findings:**

The information provided meets the requirements of the Environmental Soil Resource requirements of the Regulations.

## **RECLAMATION PLAN**

### **TOPSOIL AND SUBSOIL**

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

### **Analysis:**

#### **Redistribution**

Dwg 521.100d Refuse Pile operation plan and cross sections of Refuse Pile A shown on Dwg 521.100e show the interface between the Conoco Phillips operation and the Star Point Waste Fuel mine. Reclamation topography for the bonding scenario is shown on Dwg. 542.200a with associated cross-sections on Dwg. 542.200b. Subsoil material quantities are outlined on Dwg. 542.200f for the bonding scenario. The plan calls for placement of 1.5 ft. of subsoil over

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the outcrops of the remaining refuse (34.9 acres) and 4' of subsoil over the 19.1 acre disposal area. The notes on Dwg. 542.200f outline testing of final graded surface for acid/toxic characteristics and state that areas where native soil has been re-exposed will be gouged to reduce compaction.

The ideal final reclamation topography, with all refuse remined, is shown on Dwg. 542.200e. The corresponding subsoil cover plan is shown on Dwg. 542.200g. In this ideal scenario, 4 ft. cover will be placed over the disposal area (shown as 2.7 ac.) and 1 ft. of cover will be placed over 55.3 ac. With no subsoil placed on 16.1 acres of native ground.

**Findings:**

The information provided meets the requirements of the Operations Topsoil Subsoil requirements of the Regulations.

## **SPOIL AND WASTE MATERIALS**

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

**Analysis:**

**Refuse Piles**

The refuse piles that have been in existence at the Star Point Mine will be utilized for fuel at the Sunnyside Refuse Cogeneration Plant. If coal mine waste fires erupt during the operation, they will be extinguished by covering or excavating the burning material. According to Section 528.323, soil imported from the Neilson Pit located in Wellington, Utah may be used for this purpose. The applicant does not plan on using salvaged, stockpiled substitute topsoil for this purpose.

The application anticipates that 3.1% of the refuse (or 145,000 cu yds) will be undesirable refuse. The Disposal Area is shown on Map 521.100a (Section 528.300-321 and Section 528.322). This map shows the proposed undesirable refuse disposal area covering 5.5 acres. The material will be formed into a wedge against the existing topography. The wedge will have a maximum 4h:1v slope. The sloping sides of the wedge will face north, east and southeast. The waste will be packed forty feet deep at the center of the wedge and at a maximum of 55 feet at the highest point of the wedge.

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The undesirable refuse will be routinely compacted to prevent combustion and wind-borne transport. The plan indicates that the disposal site will be covered with four feet of soil from the subsoil pile at final reclamation (Section 528.300-321).

**Findings:**

The information provided is not adequate for the purposes of the Operations Refuse and Spoil and Waste requirements of the Regulations.

**RECOMMENDATIONS:**

Both applications include all necessary information for approval. Task 3496 provides an update to the officers and directors and they have been entered into the AVS. An AVS evaluation should be requested prior to approval of either Task 3495 or Task 3496.